

## WHAT IS A LIGHT PEN?

A light pen is a device that enables users to interact directly with the computer without having to type in commands on the keyboard. The light pen is a hand-held instrument, much like an ordinary pen, that fits comfortably in your hand. It works directly on the CRT screen to access computer programs and manipulate data. Just touch the screen with a light pen and you can select from a menu or control the cursor.

## WHAT ARE THE ADVANTAGES OF A LIGHT PEN?

Light pens have distinct advantages over joysticks, keyboards and other computer-interactive devices. First, light pens allow you to maintain concentration where it should be - on the computer screen. This means you don't have to break your concentration or lose your train of thought by looking back and forth from the screen to the keyboard. Second, it's easier to use a light pen. You can see exactly what you're doing - it's as natural as writing on paper with a pen or pencil. And, unlike a joystick, it makes no difference if your left or right-handed.

## WHAT IS A LIGHT PEN USED FOR?

Light pens can be used for simple drawing, for more sophisticated graphics, and a myriad of other applications. Pre-schoolers can learn basic educational concepts easily and students can reinforce what they've been learning in school...all in a more interesting, entertaining way. Pre-college applicants can even study for their SAT exams, greatly increasing their chances of obtaining better scores.

Let's give you some specific examples. A pre-schooler can use a light pen to learn the alphabet. With our teacher-guided, children-tested programs, children can trace letters of the alphabet or numbers one at a time to practice writing. They can also play connect-the-letters (or numbers) and much more...all by writing directly on the screen. And the child receives immediate recognition for his answers. A correct answer can be acknowledged with a happy face and music. An incorrect answer will be acknowledged kindly, not harshly with, as an example, "Sorry, try again."



Think how much easier it would be to play board games, such as chess, backgammon and checkers, using a light pen instead of having to type in each and every move. Just touch your light pen to the piece you want to move and guide it to the next position. You don't have to break your concentration either since you can keep your eyes on the screen where the game is being played.

Take a more sophisticated application. A doctor in a hospital who wants to determine the status of a patient must, if he uses conventional programs, type into the keyboard the patient's name, department and what it is he wants to obtain on the patient (e.g., status, history, medication, etc.). Not all of us are born typists, nor should we have to be. A much simpler process would be to use a light pen. All the doctor would have to do is touch the screen with the light pen and all departments in the hospital would be displayed on the CRT. He then touches the screen to the department he wants and all patients' names would be displayed. Then he touches the patient's name he wants in order to retrieve the information he needs. Simpler process... and much faster.

The applications for light pens are limitless. A light pen can be used for almost any computer task that currently requires typing commands into the keyboard or manipulation of the joystick.

### ARE ALL LIGHT PENS THE SAME?

All light pens are not the same. Prices may be similar, but durability, precision levels and extent of capability will vary greatly. Tech Sketch Light Pens, unlike others you may see advertised, are not simply "converted" ball point pens with connecting wires. While comparably priced, Tech Sketch's photo-optically controlled light pens are rugged, high-quality, precision units that are capable of performing numerous complex and sophisticated tasks to a much greater extent than other available light pens.

### DO LIGHT PENS REQUIRE SPECIAL SOFTWARE?

Light pens cannot be used with programs designed for joysticks or keyboard entry. The computer must be programmed to accept the light signals emitted from the pen. For this reason, special software is required. Users can purchase light pen programs or they can design their own.

Most other light pen manufacturers provide limited software with their product. Some offer no software at all. Tech Sketch has a number of programs currently available and will be offering more and more in the near future, because the Company is committed to the on-going development of new and different programs.

And for those who would prefer to create their own programs, Tech Sketch is preparing a booklet on self-programming with its Light Pens.



## TECH SKETCH PROGRAMS

Tech Sketch currently has six programs available, with more coming very soon. Each program comes with a set of instructions to show you how easy it is to use your Light Pen.

Program concentration at this point is on learning games, games that teach and reinforce educational concepts. These programs let players have fun while learning new skills and reinforcing other skills, such as eye-hand coordination, memory, reasoning, logic, reading, spelling and math. All games are colorful and lively.

### MEMORY JOGGER

Match objects behind "cards" on the screen. Two tries to make a match. If you fail to match two like objects, the "cards" are turned over while you try again and try to remember what you turned over before. Play with others or against the computer. Stimulates concentration and memory skills. Enjoyed by children and adults of all ages.

### MOLE ATTACK

Try to touch the funny faces with our Light Pen before they disappear from the screen. Faces appear at varying speeds and on different parts of the screen. A real test of eye-hand coordination for children 2 through 82!

### APPLE ANNIE

One in a series of programs to teach basic educational concepts to pre-schoolers (2-6 years old). Learn the alphabet with Apple Annie, numbers with Bernie Bear, time with Melissa Mouse, money and change with Kika Cat and many more currently being developed. Children learn while tracing, playing connect-the-letters (or numbers), mix 'n match and multiple choices. Correct answers are rewarded with excitement; wrong answers are treated kindly. Tested with children and educators.

### WORD SEARCH

Expand thinking and spelling skills by finding words written backwards, upside down, diagonally or forward. Good even for very young children to help identify and match letters in order. Great for special education situations where repetition is necessary. Children can build their skills without getting bored.

### TIC-TAC-TOE

Helpful for testing thinking and reasoning skills. Try to beat the computer or another player.

### FREE EXPRESSION

Children and adults can draw, design, and leave messages for other family members with this black and white, free-style drawing program. If you like what you draw, save it in memory or print it out.

Tech Sketch is continuously expanding its software base and will keep you updated as new programs are developed.



## ORDER FORM

- LP-10 - Low-cost, no switch light pen. Active at all times.
- LP-10-S - Low-cost light pen with switch. Active only when switch is signaled.
- LP-15 - High-resolution, high-speed light pen has a push switch to activate the signal. Super-sensitive. Can control cursor 6 inches from screen.

All Light Pens come with FREE demo cassette and instruction booklet.

Please send me \_\_\_\_\_ LP-10 Light Pens @ \$39.95  
\_\_\_\_\_ LP-10 Light Pens w/Switch @ \$49.95  
\_\_\_\_\_ LP-15 Light Pens w/Switch @ \$119.95  
\_\_\_\_\_ Apple II Interface cards @ \$99.95  
\_\_\_\_\_ Information as new programs are developed

Please specify type of computer to be used with pen being ordered:

\_\_\_\_\_ Commodore VIC 20  
\_\_\_\_\_ Commodore VIC 64  
\_\_\_\_\_ Atari 400/800  
\_\_\_\_\_ Apple II

Enclosed is my check for \$ \_\_\_\_\_ (allow three weeks)\*

Bill my \_\_\_\_\_ Visa \_\_\_\_\_ Master Card

Number \_\_\_\_\_ Expires / /

Signature \_\_\_\_\_

Name \_\_\_\_\_

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\* N.J. residents add 6% sales tax.

30 day money back guarantee.